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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/820,142

04/08/2004

Yoichi Hachitani

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7590

04/26/2005

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EXAMINER

CLARK, SHEILA V

ART UNIT

PAPER NUMBER

2815

DATE MAILED: 04/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

HA

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/820,142	HACHITANI, YOICHI	
	<b>Examiner</b>	<b>Art Unit</b>	
	S. V. Clark	2815	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8 is/are allowed.
- 6) ☒ Claim(s) 1,3,6 and 9-12 is/are rejected.
- 7) ☒ Claim(s) 2,4 and 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)     | Paper No(s)/Mail Date. ____   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____  | 6) <input type="checkbox"/> Other: ____                                     |

Claims 6, 9, 10, 11, 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 appears to reiterate the features already claimed in claim 1 from which it depends and is therefore redundant. It is also unclear what is meant by a glass window "made of the glass for a window" this also appears redundant.

In claims 10 the use of "precision press molding" should be better described. It is unclear if this is used to make the glass or attach the glass. How is this method being used?

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 6, 7, 9, 11, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dumesnil et al. in view of the the Admitted prior art in the instant disclosure on pages 1-2

Dumesnil et al teaches the use of glass seals in semiconductor packages that have a linear expansion coefficient in the range of that recited in the claims (see col.2) and claim 1 recites that said glass also may be formed of copper and phosphorous (CuO and PO).

As the claims recitation of "made of plastic" fails to render the entire package as consisting of plastic but may also include certain piece parts in said package made of

plastic. As semiconductor packages may be include an array of components pieces including such materials as plastic (such as for encapsulations, underfill materials, coatings) and as the teachings of Dumesnil et al are relative to typical semiconductor packages in general it would have been therefore obvious to one having ordinary skill in this art that the typical package of Dumesnil would include typical components such as plastics (i.e. encapsulations, underfill materials, coatings etc.) which are commonly used for protective purposes.

Further though Dumesnil et al fails to discuss use of glass as windows he does mention use of glass sealing materials in the broad sense and as glass windows and lenses are commonly used to seal packages it would have been obvious to one having ordinary skill in this art that the sealing glass of Dumesnil also includes those glass windows and lenses as they are commonly uses as seals as mentioned above and as these glass windows (i.e. lens) are further taught to by typical in the admitted prior art in the disclosure on pages 1-2.

Use of temperatures in the range of those recited in claim 7 is also taught (col.3, line 26).

Claim 9 contains components that depend on the used of method of making characteristics (i.e. precision press molded) given no patentable weight in determining the patentability of the final device product.

Note that a Aproduct by process≡ claim is directed to the product per se, no matter how actually made, In re Hirao 190 USPQ 15 at 17(footnote 3). See also In re Brown, 173 USPQ 685; In re Luck, 177 USPQ 523; In re Fessman, 180 USPQ 324; In re Avery, 186 USPQ 161 and In re Marosi et al, 218 USPQ 289, all of which make it clear that it is the patentability of the final product per se which must be determined in Aproduct by process≡ claims, and not the patentability of the process, and that, as here, an old or obvious product produced by a new method is not patentable as a product, whether claimed in Aproduct by process≡ claims or not.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dumesnil et al in view of the Admitted prior art in the instant disclosure on pages 1-2 and Hamanaka et al.

Dumesnil et al teaches the use of glass seals in semiconductor packages that have a linear expansion coefficient in the range of that recited in the claim (see col.2).

Further though Dumesnil et al fails to discuss use of glass as windows he does mention use of glass sealing materials in the broad sense and as glass windows and lenses are commonly used to seal packages it would have been obvious to one having ordinary skill in this art that the sealing glass of Dumesnil also includes those glass windows and lenses as they are commonly uses as seals as mentioned above and as these glass windows (i.e. lens) are further taught to by typical in the admitted prior art in the disclosure on pages 1-2.

Glasses or lenses may typically be produced by press molding Hamanaka teaches press molding of a lens or glass (i.e. col. 1, line 44) in the description of the prior art relating that this method is a well known in the production of lens (i.e glass). As Dumesnil teaches that his device is related to typical package convention is would have been obvious that these typical conventions would include the well known use of press molding to form a glass lens.

Use of temperatures recited in the claim is also taught (col.3, line 26).

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Claims 1, 3, 6, 7, 9, 10,11, 12 are rejected.

Claims 2, 4, 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 8 is considered allowable over the prior art of record.

Nagai et al, Fine, Goto et al, Chacon et al, Keifer and Honda et al are cited to show use of sealing glasses in packages.

Any inquiry concerning this communication should be directed to S. V. Clark at telephone number (571) 272-1725.

  
S. V. Clark  
Primary Examiner  
Art Unit 2815

April 3, 2005